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**Technology Center 2100**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/309,831  
Filing Date: May 11, 1999  
Appellant(s): MIELENHAUSEN, THOMAS C.

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Nelson R. Capes  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 4/14/05 appealing from the Office action mailed 1/27/05 and the order from the Board of Appeal and Interference 4/24/06.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

A statement identifying the related appeals, interferences, and judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal is contained in the brief.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,623,406	ICHBIAH	4-1997
5,096,423	GOLDWASSER	3-1992

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-22 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Ichbiah (US Pat No. 5,623,406, 4/22/97, filed 3/6/95) in view of Goldwasser (US Pat No. 5,096,423, 3/17/92, filed 12/29/87).

Regarding independent claim 1 and its dependent 9-10, Ichbiah discloses:

- storing in the memory a second data structure encoding a plurality of abbreviations and corresponding words (col 4, lines 53-67: a glossary of abbreviations and the corresponding words and phrases is stored in the system; col 5, line 25 to col 6, line 18; abstract: "retrieving words and phrases from abbreviations" inherently shows there is a list of abbreviations and corresponding words and phrases for retrieving)
- displaying a list of suggested words and phrase corresponding to the selected abbreviation, and receiving input from the user to choose the desired word and phrase for the abbreviation (col 4, lines 53-67: the fact that multiple matching words and phrases for a proposed abbreviation are displayed by the system in the form of option in advisory table upon the entry of characters into the system shows displaying a list of suggested words and phrases for an abbreviation for selecting; col 12, lines 42-67: more than one choice of matching words are displayed to users for selecting)

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- displaying a list of suggested abbreviations corresponding to the selected word and receiving input from the user to choose the desired abbreviation (col 5, lines 15-60)
- receiving input from the user to choose the desired abbreviation corresponding to the phrase or to choose the desired phrase corresponding to the abbreviation (col 12, line 42 to col 13, line 20)

Ichbiah does not explicitly disclose:

- storing in the memory a first data encoding a plurality of words and corresponding abbreviations
- selecting a word in the text to be converted to an abbreviation and converting the selected word to a corresponding abbreviation
- selecting an abbreviation in the text to be converted to a word and converting the abbreviation to a word

Instead, Ichbiah discloses that:

- a glossary of abbreviations and corresponding words and phrases (col 5, line 25 to col 6, line 38) which is considered equivalent to the second data structure
- entering of data in the form of abbreviation and standard text entry (col 5, lines 16-18)
- converting the abbreviation to the corresponding phrase (col 6, lines 10-60)

This inherently shows that the entered data in the form of abbreviation is selected to be converted to corresponding phrase using the data in the glossary. In other words, Ichbiah discloses selecting an abbreviation in the text to be converted to a word and

converting the abbreviation to a word using the second data structure.

Goldwasser discloses:

- storing a data structure encoding a plurality of words and corresponding abbreviations (col 5, lines 27-33: storing the sequences of keypresses, which are long sequences of characters of words, and the correspondent abbreviations)
- selecting a word in the text to be converted to an abbreviation and converting the selected word to a corresponding abbreviation using said data structure (abstract; col 2, lines 39-64; col 4, line 28 to col 5, line 11: the fact that highlighting, sounding beeps, or pronouncing the characters of the abbreviations whenever the user neglects to use the abbreviation for a word in the text keypressed by the user shows that said word is selected to be converted into a corresponding abbreviation; the stored words and their corresponding abbreviations in Goldwasser used for the converting purpose as mentioned also implies that when said memory is first created, a word in the text, which is can be any kind of text in reality, is selected to be converted into a corresponding abbreviation by the creator)

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Goldwasser into Ichbiah to obtain converting from a word and phrase to a corresponding abbreviation and converting from an abbreviation to a corresponding word and phrase since Goldwasser provides the first method and Ichbiah provides the second method where both are to help users fast finding a right word or a right abbreviation in writing documents.

Regarding claims 2 and 16, Ichbiah discloses editing, updating and customizing the data structures, which are words and corresponding abbreviations (col 7, line 55 to col 8, line 47; col 14, lines 3-27; col 11, line 35 to col 12, line 40).

Regarding claims 3-6, Ichbiah discloses that the word is selected by a user using a keyboard command or using a mouse (col 3, lines 63-65; col 14, lines 29-58), and an abbreviation is selected by a user using a keyboard command or using a mouse (col 12, line 60 to col 13, line 5).

Regarding claims 7-8, 11-12, Ichbiah discloses:

- displaying a list of suggested abbreviations corresponding to the selected word and receiving input from the user to choose the desired abbreviation (col 5, lines 15-60)
- recognizing an abbreviation to be converted to words and phrases when entering text data (col 5, lines 16-24; col 6, line 33 to col 7, line 3; col 14, line 29 to col 15, line 55)
- receiving input from the user to choose the desired abbreviation corresponding to the phrase or to choose the desired phrase corresponding to the abbreviation (col 12, line 42 to col 13, line 20)
- converting the abbreviations to corresponding words or phrases (col 12, line 42 to col 13, line 20: the input command from the user is for converting an abbreviation to a corresponding word and phrase)

- displaying a list of suggested words and phrases corresponding to an abbreviation, and receiving input from the user to choose the desired word and phrase for the abbreviation (col 4, lines 53-67, see claim 1)

Ichbiah does not explicitly disclose:

- scanning the text for words to be converted to abbreviations and converting words selected by the data processing to corresponding abbreviation
- scanning the text for abbreviations to be converted to words or phrases and converting abbreviations selected by the data processing to corresponding words

Goldwasser discloses a list of suggested words and phrases corresponding to an abbreviation selected in the text (col 3, lines 8-37: providing a menu of linguistic expressions of words and phrases having corresponding abbreviation for users to select one for the selected word in the text).

It would have been obvious to an ordinary skill at the time of the invention was made to have modified Ichbiah and Goldwasser to include scanning text for abbreviations to be converted to corresponding words and scanning text for words and phrases to be converted to corresponding abbreviations for the following reason. The fact that the word entry of data text is *recognized* for a corresponding abbreviation based on the glossary of words and abbreviations suggests scanning the entered text for finding a corresponding abbreviation.

Regarding claims 13-14, Ichbiah discloses selecting an abbreviation from the first data structure (abstract; col 3, lines 50-65, col 5, lines 15-60), and selecting an abbreviation



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from the second data structure (col 4, line 53 to col 5, line 60). Ichbiah also discloses that when typing the abbreviation, the corresponding phrase is inserted in the displayed text (figure 3; col 14, line 28 to col 15, line 27). This shows that a phrase or word corresponding to a selected abbreviation is inserted into the text at a position selected by the user.

Independent claim 15 includes the same limitations as in claims 1, 9-10, and 13-14, and is rejected under the same rationale.

Independent claim 17 and its dependent claim 22 are for a data processing apparatus for performing the method claims 1, 9-10, and 13, and are rejected under the same rationale.

Claims 18-22 are for a data processing apparatus of method claims 7-8, 11-12, and are rejected under the same rationale.

#### **(10) Response to Argument**

Regarding claim 1, Applicants argue that Goldwasser does not teach selecting a word in the text to be converted to an abbreviation since in Goldwasser, the user is merely making data entry to existing text, not selecting a word in the text to be converted (Remarks, page 3).

Examiner respectfully disagrees.

Goldwasser does disclose selecting a word in the text to be converted to an abbreviation (abstract, col 2, line 56 to col 3, line 27). The fact that highlighting, sounding beeps, or pronouncing the characters of the abbreviations whenever the user neglects to use the abbreviation for a word in the text keypressed by the user shows that said word is selected to be converted into a corresponding abbreviation. The stored words and their corresponding abbreviations in Goldwasser used for the converting purpose as mentioned also implies that when the list of words and corresponding abbreviation is first created, a word in the text, which is can be any kind of text in reality, is selected to be converted into a corresponding abbreviation by the creator.

Regarding claims 3-6, Applicants argue that Ichbiah only converts abbreviations to words, not vice-versa, and therefore, does not teach converting words to abbreviations. Examiner respectfully disagrees.

Ichbiah teaches claims 3-4 which require that the word is selected by the user using a keyboard command or using a mouse (col 3, lines 50-65: “.. *one of the matching words is selected using a word selecting command*..”). Ichbiah also teaches claims 5-6 which require that the abbreviation is selected by the user using a keyboard command or using a mouse command (col 12, line 60 to col 13, line 5).

Regarding claim 7, Applicants argue that the reference do not disclose the step of scanning the text for words to be converted to abbreviations and converting words

selected by the data processing method to corresponding abbreviations using the first data structure (Remarks, page 4).

Examiner respectfully disagrees.

The fact that Ichbiah discloses recognizing an abbreviation to be converted to words and phrases when entering text data (col 5, lines 16-24; col 6, line 33 to col 7, line 3; col 14, line 29 to col 15, line 55) implies that the text data is scanned for recognizing an abbreviation to be converted to words and phrases.

Regarding claim 13, Applicants argue that Examiner's statements are self-contradictory since Examiner states "Ichbiah does not explicitly disclose storing in memory a first data [structure] encoding a plurality of words and corresponding abbreviations" then states that "Ichbiah discloses selecting an abbreviation from the first data structure" (Remarks, page 4).

Examiner does not agree completely.

It is true that Ichbiah does not disclose storing the first data structure of a plurality of words and abbreviations. However, Ichbiah does disclose storing the second data structure of a plurality of abbreviations and corresponding words (office action, pages 2). The admission that Ichbiah discloses selecting an abbreviation is not completely incorrect since Ichbiah does disclose selecting an abbreviation from the list of stored abbreviations and corresponding words (col 5, lines 15-60). Said stored abbreviations and corresponding words, even though is not actually the claimed first data structure,

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does show the correspondence between the abbreviations and the words and vice versa.

Regarding claim 15, Applicants argue that the reference do not show the step that "the user instructing the data processing method to select a position in the text for insertion of an abbreviation", and since said limitation is found in claim 13, which is already shown to be allowable according to Applicants, claim 15 should be allowable (Remarks, page 4).

Examiner respectfully disagrees.

Goldwasser discloses "the user instructing the data processing method to select a position in the text for insertion of an abbreviation" (col 2, lines 44-49, line 56 to col 3, line 27:"teaching a computer system user *shorter sequences of user actions (abbreviations)* for causing the computer to perform data manipulations of all types, including text and data processing functions, corresponding to longer sequences of user actions", "... both the number of letters of a word or phrase that must be typed before the word or phrase will be displayed in a menu ... and the position of the word or phrase in the menu, so that the *user can add this word or phrase to the text* by typing this number of letters and then selecting the word or phrase from the menu..."; the fact that the user *can add this word/phrase to the text* and the text in the menu that has corresponding abbreviation is highlighted clearly shows selecting, by a user, a position in the text for inserting an abbreviation).

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Said argued limitation does not require selecting an abbreviation from the first data structure as in claim 13 that Applicants consider allowable subject matter. Therefore, Applicants' arguments are not persuasive.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Cong-Lac Huynh  
Primary Examiner  
Art Unit 2178

clh  
5/30/06

Conferees:

  
Heather Herndon  
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**STEPHEN HONG**  
**SUPERVISORY PATENT EXAMINER**